

Appl. No. 10/628,153
Amdt. dated August 14, 2008

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1- 38 (cancelled)

Claim 39 (previously presented): A process for manufacturing a copper heat exchanger comprising at least one collecting and distributing container that comprises the steps of:

- (a) providing at least one collecting and distributing container,
- (b) providing a copper heat exchanger comprising a brazed matrix supported by a stack of several plates separated by fins forming spacers between said plates, at least one layer of an alloy containing copper and tin being deposited on at least part of the brazed matrix, said copper/tin alloy comprising at least 1.0 weight % of tin, said brazed matrix comprising copper and phosphorus, and
- (c) welding said container to said at least one layer of the brazed matrix.

Claims 40 - 41 (cancelled)

Claim 42 (previously presented): The process according to Claim 39, wherein said fluid collecting and distributing container comprises copper or stainless steel.

Claims 43 - 45 (cancelled)

Claim 46 (previously presented): The process according to Claim 39, wherein said copper/tin alloy comprises tin in an amount selected from the group consisting of:

- (a) at least about 1.05% tin by weight;
- (b) at least about 1.2% tin by weight;
- (c) less than about 10% tin by weight;
- (d) about 2% to about 8% tin by weight; and
- (e) about 3% to about 6% tin by weight.

Claim 47 (cancelled):

Claim 48 (withdrawn): A heat exchanger comprising a brazed matrix supported by a stack of several plates separated by fins forming spacers between said plates, at least one layer of an alloy containing copper and tin being deposited on at least part of the brazed matrix, said copper/tin alloy comprising at least 1.0 weight % of tin, and further comprising at least one collecting and distributing container welded on said at least one layer of the brazed matrix.

Claim 49 (withdrawn): A heat exchanger according to claim 48, which is made of copper.

Claim 50 (previously presented): A method which may be used for welding a metal workpiece onto a brazed zone, said method comprising:

- a) creating a brazed zone on a first workpiece, wherein said brazed zone comprises a copper / phosphorus alloy;
- b) depositing at least one additional layer onto at least part of said brazed zone, wherein:
 - 1) said additional layer comprises a copper / tin alloy; and
 - 2) said copper / tin alloy comprises at least about 1.0 % tin by weight; and
- c) welding a second workpiece to said additional layer, wherein said additional layer protects said brazed zone during said welding.

Claim 51 (withdrawn): An apparatus which may be used as a heat exchanger, said apparatus comprising:

- a) at least one fluid distributing and collecting container;
- b) at least one intermediate material, wherein:
 - 1) said intermediate material comprises a copper / tin alloy;
 - 2) said copper / tin alloy comprises at least about 1.0% tin by weight; and
 - 3) said collecting container is welded to said intermediate material; and
- c) a matrix, wherein:
 - 1) said matrix comprises a plurality of plates separated by a plurality of fins;

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- 2) said plates and said fins are brazed together in at least one brazed zone;
- 3) said brazed zone comprises a copper / phosphorous alloy; and
- 4) said intermediate material is deposited over said brazed zone.